

**ABSTRACT**

A mask is provided to be used with nanoprint lithography processes to facilitate the reproduction small features required for the production of integrated circuits. A translucent substrate is provided along with one or more three-dimensional features that include one or more vertical sidewalls. An absorbing material is deposited upon one or more of the vertical sidewalls so that light in an incident direction to an upper surface of the substrate will be absorbed by the absorbing material, resulting in light blocking features. One or more horizontal surfaces are formed upon one or more of the three-dimensional features, that allow light rays to exit a lower surface of the substrate unobstructed by the absorbing material.